

Amendments to the Claims

The listing of claims below is intended to replace all prior listings of the claims:

1. (Currently amended) A method of manufacture of a soluble, microbiologically active and stable acrolein polymer comprising the following steps in sequence: (a) polymerising acrolein in the presence of base to form a polymer of acrolein; (b) dissolving the polymer of acrolein in an alcohol selected from monoalcohols and polyols optionally with addition of water to form an alcohol solution of the polymer of acrolein and providing a pH of no more than 7 wherein the polymer of acrolein is not subject to heating in air at a temperature of at least 60°C before dissolving in alcohol; (c) heating the alcohol solution of the polymer of acrolein of pH of no more than 7 to react the polymer of acrolein with the alcohol; and (d) mixing base with the polymer of acrolein, wherein the polymer of acrolein does not precipitate when further diluted by water by a factor of one in ten parts by volume.

2. (Currently Amended) A method according to claim 1, wherein the ~~aerolein~~ polymer of acrolein comprises a co-monomer in an amount of up to 10% by weight of the total monomer composition.

3. (Currently Amended) A method according to claim 1, wherein the ~~aerolein~~ polymer of acrolein is a homopolymer.

4. (Currently Amended) A method according to claim 1, wherein the ~~aerolein~~ polymer of acrolein is collected from the polymerisation reaction as a precipitate and dissolved in the alcohol.

5. (Cancelled)

6. (Currently Amended) A method according to claim 1, wherein the ~~aerolein~~ polymer of acrolein is isolated as a solid from the step of polymerisation in the presence of base ~~and dissolved in the alcohol without a step of oxidising the isolated solid by heating in air~~.

7. (Currently Amended) A method according to claim 1, wherein the ~~aerolein~~ polymer of acrolein is dissolved in the alcohol by heating the acrolein polymer in the alcohol to a temperature in the range of from 40 to 105°C.

8. (Currently Amended) A method according to claim 1₁ wherein alcohol is a polyalkylene glycol.

9. (Cancelled)

10. (Currently Amended) A method according to claim 1₁ wherein the ~~aerolein~~ polymer of acrolein is heated in the alcohol at a temperature in the range from 50 to 105°C, for a period in the range of from fifteen minutes to five hours.

11. (Currently Amended) A method according to claim 1₁ wherein the ~~aerolein~~ polymer of acrolein dissolved in the alcohol in step (b) has an acid content of less than 1 mole of carboxyl groups per kilogram of polymer.

12. (Currently Amended) A method according to claim 11₁ wherein said acid content is less than 0.5 mole ~~acid~~ carboxyl groups per kilogram of polymer.

13. (Currently Amended) A method according to claim 1₁ wherein the base is added to the alcohol solution following said heating formation of the alcohol solution.

14. (Currently Amended) A method according to claim 13₁ wherein the pH of the resulting solution is in the range of from 7 to 9.5.

15. (Currently Amended) A method according to claim 13₁ wherein the pH of the resulting solution is in the range of from 7.5 to 8.5.

16. (Currently Amended) A method according to claim 1₁ wherein the base comprises a compound selected from the group consisting of alkali metal carbonate, alkali metal hydroxide, ~~such as sodium hydroxide~~ and mixtures thereof.

17. (Currently Amended) A method according to claim 16₁ wherein the base comprises sodium carbonate and/or potassium carbonate.

18. (Currently Amended) A method according to claim 1₁ wherein the ~~aerolein~~ polymer of acrolein used in the step of heating in the alcohol is in a concentration in the alcohol of from 0.5 to 50% by weight.

19. (Currently Amended) A method according to claim 18, wherein the concentration is from 0.5 to 40% by weight.

20. (Currently Amended) A method according to claim 1, wherein the alcohol is polyethylene glycol and is present at a concentration in the range of from 5 to 90% by weight.

21. (Currently Amended) A method according to claim 1, wherein the alcohol is a polyethylene glycol of molecular weight in the range of from 200 to 20,000.

22. (Previously Presented) A composition prepared according to the method of claim 1.

23-27. (Cancelled)

28. (New) A method for treating a gastrointestinal microbiological infection comprising:
administering to a subject a polymer of acrolein produced according to the method of claim 1, said administering being effective to treat the gastrointestinal microbiological infection.

29. (New) The method according to claim 28, wherein the subject is an animal.